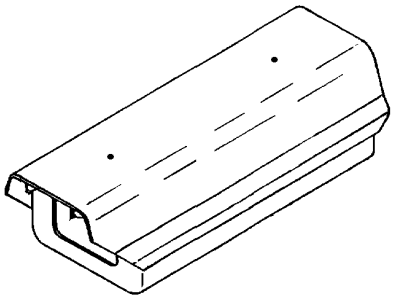

# EH3500 Series Environmental Enclosure

## Maintenance/Service Manual

C478SM (8/99)

Pelco • 300 W. Pontiac Way, Clovis • CA 93612-5699 USA • Pelco Online @ http://www.pelco.com
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## IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following warnings should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.

2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.

3. Only use replacement parts recommended by Pelco.

4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.

5. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

| CAUTION: |
| --- |
| RISK OF ELECTRIC SHOCK.<br>DO NOT OPEN. |

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

## DESCRIPTION

The EH3508/EH3512/EH3515 Series are indoor/outdoor light-duty camera enclosures designed for use with various cameras on the market and accommodate fixed focal length lenses or motorized zoom lenses, with or without auto-iris operation.

The lid of the enclosure is hinged in the front providing easy access during installation and when camera/lens adjustments are necessary. The camera sled itself serves as an elevation block. You can remove, flip, and then reinstall the sled to elevate the camera. All wiring and cabling is brought into the enclosure through adjustable gland at the bottom rear of the enclosure.

The rear link-lock latch can be used with a padlock of suitable size for applications requiring additional security.

The EH3515L Legacy® Series enclosures are used with pan/tilt units in Pelco's PT480 Series. The enclosures are mounted on the bottom. A connector in the pan/tilt unit attaches the enclosure, mechanically and electrically, to the pan/tilt unit.

### MODELS

#### EH3500 SERIES

| | |
| --- | --- |
| EH3508 | Enclosure, indoor/outdoor, 8.75-inch (22.23 cm) lower body length. (CE) |
| EH3508-1 | EH3508 with 120 VAC defroster and thermostatically controlled heater; 13 watts |
| EH3508-2 | EH3508 with 24 VAC defroster and thermostatically controlled heater; 13 watts |

| | |
|---|---|
| EH3508-3 | EH3508 with 230 VAC defroster and thermostatically controlled heater; 13 watts |
| EH3512 | Enclosure, indoor/outdoor, 12.75-inch (32.38 cm) lower body length. (CE) |
| EH3512-1 | EH3512 with 120 VAC defroster, blower, and thermostatically controlled heater; 17 watts |
| EH3512-1HD | EH3512 with 120 VAC defroster and thermostatically controlled heater; 13 watts |
| EH3512-2 | EH3512 with 24 VAC defroster, blower, and thermostatically controlled heater; 15 watts |
| EH3512-2HD | EH3512 with 24 VAC defroster and thermostatically controlled heater; 13 watts |
| EH3512-3 | EH3512 with 230 VAC defroster, blower, and thermostatically controlled heater; 22 watts |
| EH3512-3HD | EH3512 with 230 VAC defroster and thermostatically controlled heater; 13 watts |
| EH3515 | Enclosure, indoor/outdoor, 15.75-inch (40.00 cm) lower body length. (CE) |
| EH3515-1 | EH3515 with 120 VAC defroster, blower, and thermostatically controlled heaters; 27 watts |
| EH3515-1HD | EH3515 with 120 VAC defroster and thermostatically controlled heaters; 23 watts |
| EH3515-2 | EH3515 with 24 VAC defroster, blower, and thermostatically controlled heaters; 25 watts |
| EH3515-2HD | EH3515 with 24 VAC defroster and thermostatically controlled heaters; 23 watts |
| EH3515-3 | EH3515 with 230 VAC defroster, blower, and thermostatically controlled heaters; 32 watts |
| EH3515-3HD | EH3515 with 230 VAC defroster and thermostatically controlled heaters; 23 watts |

## EH3515L LEGACY® SERIES

| | |
|---|---|
| EH3515L | Enclosure, indoor/outdoor, 15.75-inch (40.00 cm) lower body length. (CE) |
| EH3515L-1 | EH3515 with 120 VAC defroster, blower, and thermostatically controlled heaters; 27 watts (CE) |
| EH3515L-1HD | EH3515 with 120 VAC defroster and thermostatically controlled heaters; 23 watts |
| EH3515L-2 | EH3515 with 24 VAC defroster, blower, and thermostatically controlled heaters; 25 watts (CE) |
| EH3515L-2HD | EH3515 with 24 VAC defroster and thermostatically controlled heaters; 23 watts |
| EH3515L-3 | EH3515 with 230 VAC defroster, blower, and thermostatically controlled heaters; 32 watts (CE) |
| EH3515L-3HD | EH3515 with 230 VAC defroster and thermostatically controlled heaters; 23 watts |

## MAINTENANCE

Regularly scheduled maintenance prolongs the operational life and appearance of the equipment. Clean the window regularly with a soft cloth using a mild, nonabrasive detergent and water to maintain picture clarity.

## EXPLODED ASSEMBLY AND WIRING DIAGRAMS

### EH3500 SERIES ENCLOSURE

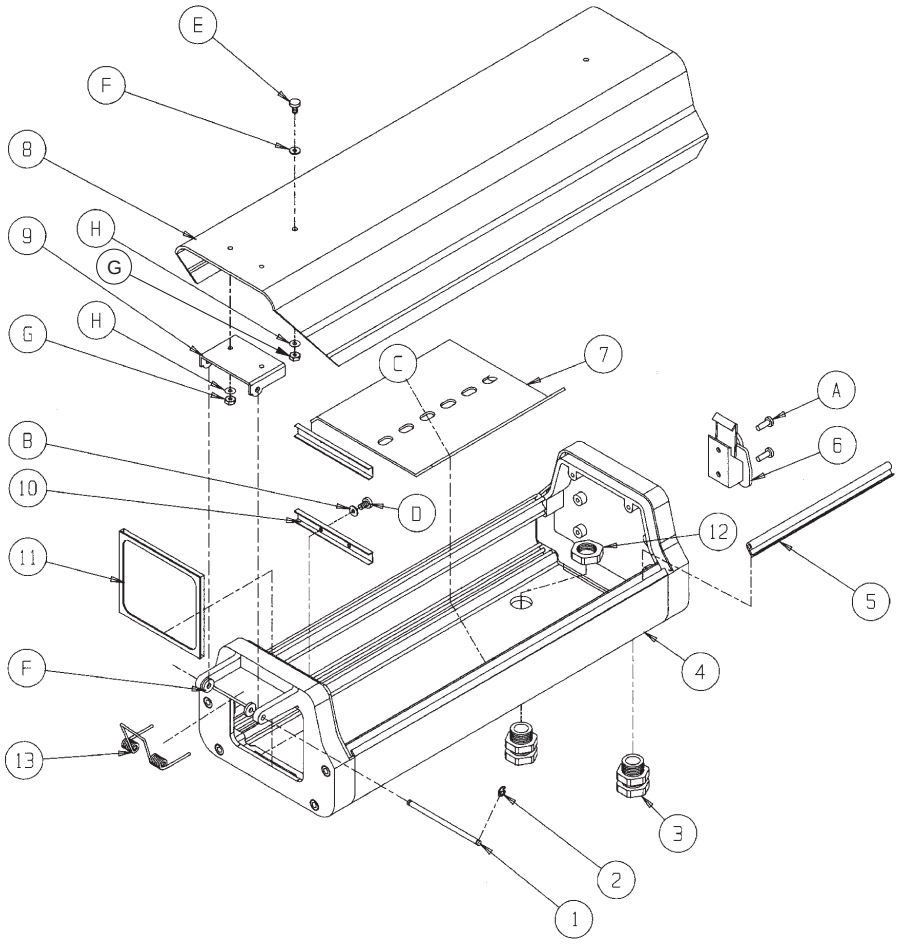


**Figure 1.** EH3500 Series Enclosure Exploded Assembly Diagram

**Table A.** EH3500 Series Enclosure Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| 1 | 1 | Lid attachment pin | EH350010105 |
| 2 | 2 | Type E clip | ZH.125ECLIP |
| 3 | 2 | Gland | EH470010007B |
| 4 | 1 | Body | |
| | | 8-inch enclosure | 37004001ASSY |
| | | 12-inch enclosure | 37004000ASSY |
| | | 15-inch enclosure | 35154000ASSY |
| 5 | | Bulb seal gasket | EH470010011 |
| | 27 in. | 8-inch enclosure | |
| | 36 in. | 12-inch enclosure | |
| | 42 in. | 15-inch enclosure | |
| 6 | 1 | Link latch lock | EH550010010 |
| 7 | 1 | Camera sled | |
| | | 8-inch enclosure | EH35064236COMP |
| | | 12-inch and 15-inch enclosure | EH35004256COMP |
| 8 | 1 | Lid with latch | |
| | | 8-inch enclosure | EH35084135COMP |
| | | 12-inch enclosure | EH35004235COMP |
| | | 15-inch enclosure | 35154003COMP |
| 9 | 1 | Lid bracket hinge | EH35004141COMP |
| 10* | 2 | Window bracket | EH35004142COMP |
| 11 | 1 | Window and gasket | EH35001000ASSY |
| 12 | 2 | Gland nut | EH470010008B |
| 13 | 1 | Lid spring | EH350010107 |
| A | 2 | Rivet | ZHRVT1/8X3/8CE |
| B* | 4 | Flat washer | ZH148X375X32C |
| C | 2 | Screw, 6-32 x 3/8-inch, Phillips, pan head | ZH6-32X.375SPP |
| D* | 4 | Screw, 6-32 x 3/8-inch, Phillips, type F | ZH6-SFX.375SPP |
| E | 2 | Screw, 4-40 x 3/8-inch, Phillips, pan head | ZH4-40X.375SPP |
| F | 2 | Nylon washer | |
| | | 8-inch enclosure | ZH200X437X62N |
| | | 12-inch and 15-inch enclosure | ZH131X361X62N |
| G | 4 | Nut, 4-40, hex | ZH4-40NUTSH |
| H | 4 | Internal tooth lock washer, #4 | ZH4LWSIS |

* Applies only to EH3508, EH3512, and EH3515.

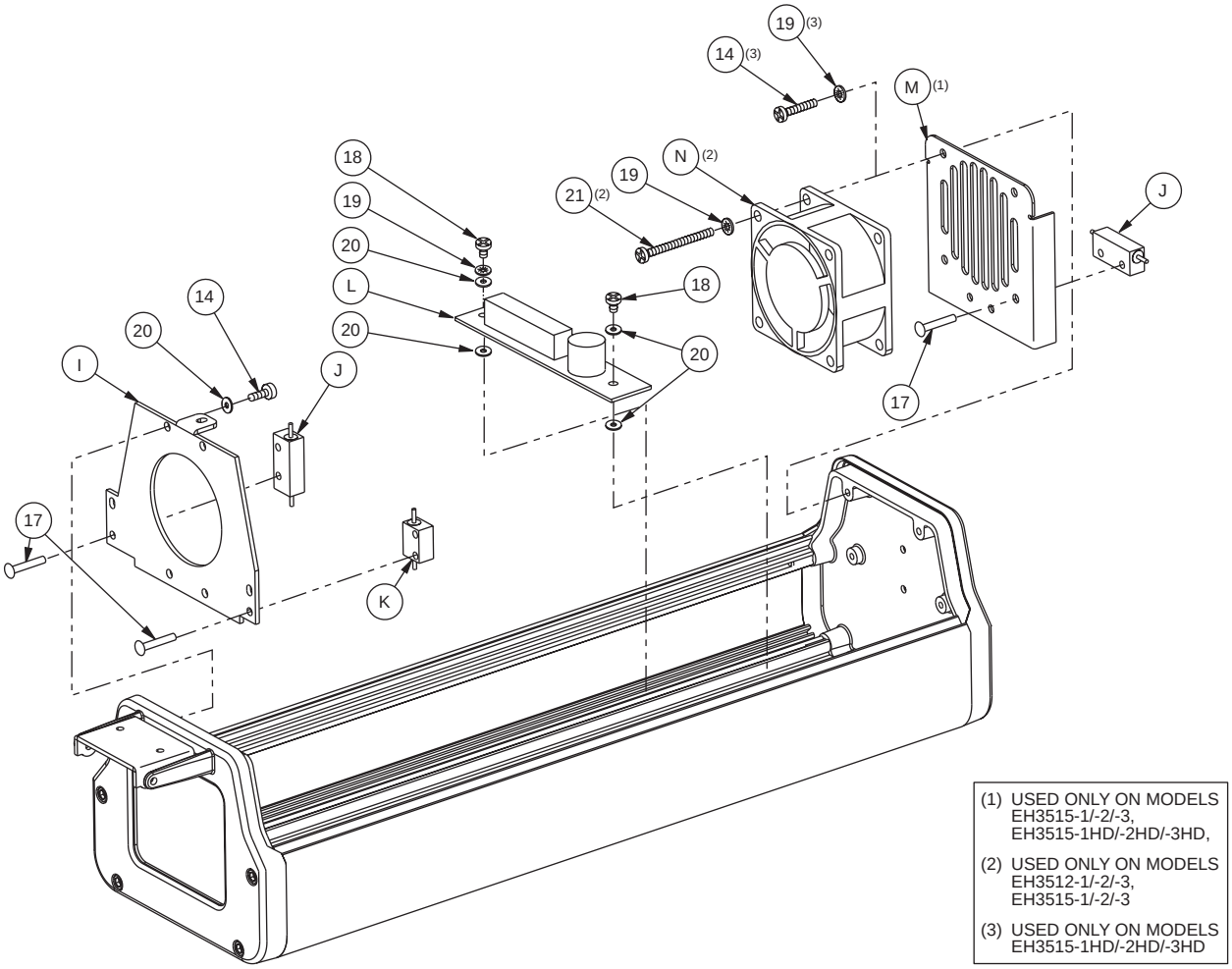


**Figure 2.** EH3508/EH3512/EH3515 Series Accessories Exploded Assembly Diagram

**Table B.** EH3508 Series Accessories Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| I | 1 | Heater bracket | 9484024 |
| J | | Heater, thermostatically controlled | |
| | 1 | 120 VAC | HT21-0201-0100 |
| | 1 | 24 VAC | HT02-1022-4310 |
| | 1 | 230 VAC | HT23-0201-0100 |
| K | | Defroster, continuous-duty | |
| | 1 | 120 VAC | HT21-1201-0100 |
| | 1 | 24 VAC | HT02-0322-4306 |
| | 1 | 230 VAC | HT23-1201-0100 |
| L | 1 | PC board | PCB9100301ASSY |
| 14 | 4 | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| 15 | | Not used | |
| 16 | | Not used | |
| 17 | 4 | Pop rivet, 3/8-inch | ZHRVT1/8X3/8CE |
| 18 | 2 | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| 19 | 1 | Internal tooth lock washer, #6 | ZH6LWSIS |
| 20 | 8 | Nylon washer | ZH131X361X62N |
| 24 VAC Model Only | | | |
| * | 1 | 24 VAC rectifier | PCB9000277ASSY |

* Illustrated in 24 VAC wiring diagram in Figure 3.

**Table C.** EH3512 Series Accessories Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| I | 1 | Heater bracket | 9484024 |
| J | | Heater, thermostatically controlled | |
| | 1 | 120 VAC | HT21-0201-0100 |
| | 1 | 24 VAC | HT02-1022-4310 |
| | 1 | 230 VAC | HT23-0201-0100 |
| K | | Defroster, continuous-duty | |
| | 1 | 120 VAC | HT21-1201-0100 |
| | 1 | 24 VAC | HT02-0322-4306 |
| | 1 | 230 VAC | HT23-1201-0100 |
| L | 1 | PC board | PCB9100301ASSY |
| N | | Blower | |
| | 1 | 120 VAC | MM750010003 |
| | 1 | 24 VDC | ED210005 |
| | 1 | 230 VAC* | MM750010003 |
| 14 | 4 | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| 15 | | Not used | |
| 16 | | Not used | |
| 17 | 4 | Pop rivet, 3/8-inch | ZHRVT1/8X3/8CE |
| 18 | 2 | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| 19 | | Internal tooth lock washer, #6 | ZH6LWSIS |
| | 5 | EH3512-1/-2/-3 | |
| | 3 | EH3512-1HD/-2HD/-3HD | |
| 20 | 8 | Nylon washer | ZH131X361X62N |
| 21 | 2 | Screw | |
| | | EH3512-1/-3: 6-32 x 1 1/2-inch, Phillips, pan head | ZH6-32X1.50SPS |
| | | EH3512-2: 6-32 x 1 3/8-inch, Phillips, pan head | ZH6-32X1.375SPP |
| 24 VAC Models Only | | | |
| ** | 1 | 24 VDC rectifier board | PCB9000277ASSY |

* Uses 120 VAC blower and resistor (resistor not included)
** Illustrated in 24 VAC wiring diagram in Figure 3.

**Table D.** EH3515 Series Accessories Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| I | 1 | Heater bracket | 9484024 |
| J | | Heater, thermostatically controlled | |
| | 2 | 120 VAC | HT21-0201-0100 |
| | 2 | 24 VAC | HT02-1022-4310 |
| | 2 | 230 VAC | HT23-0201-0100 |
| K | | Defroster, continuous-duty | |
| | 1 | 120 VAC | HT21-1201-0100 |
| | 1 | 24 VAC | HT02-0322-4306 |
| | 1 | 230 VAC | HT23-1201-0100 |
| L | 1 | PC board | PCB9100301ASSY |
| M | 1 | Rear heater bracket | MF01-0030-004A |
| N | | Blower | |
| | 1 | 120 VAC | MM750010003 |
| | 1 | 24 VDC | ED210005 |
| | 1 | 230 VAC* | MM750010003 |
| 14 | | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| | 4 | EH3515-1/-2/-3 | |
| | 6 | EH3515-1HD/-2HD/-3HD | |
| 15 | | Not used | |
| 16 | | Not used | |
| 17 | 6 | Pop rivet, 3/8-inch | ZHRVT1/8X3/8CE |
| 18 | 4 | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| 19 | 4 | Internal tooth lock washer, #6 | ZH6LWSIS |
| 20 | 8 | Nylon washer | ZH131X361X62N |
| 21 | 2 | Screw | |
| | | EH3515-1/-3: 6-32 x 1 1/2-inch, Phillips, pan head | ZH6-32X1.50SPS |
| | | EH3515-2: 6-32 x 1 3/8-inch, Phillips, pan head | ZH6-32X1.375SPP |
| 24 VAC Models Only | | | |
| ** | 1 | 24 VDC rectifier board | PCB9000277ASSY |

* Uses 120 VAC blower and resistor (resistor not included)
** Illustrated in 24 VAC wiring diagram in Figure 3.

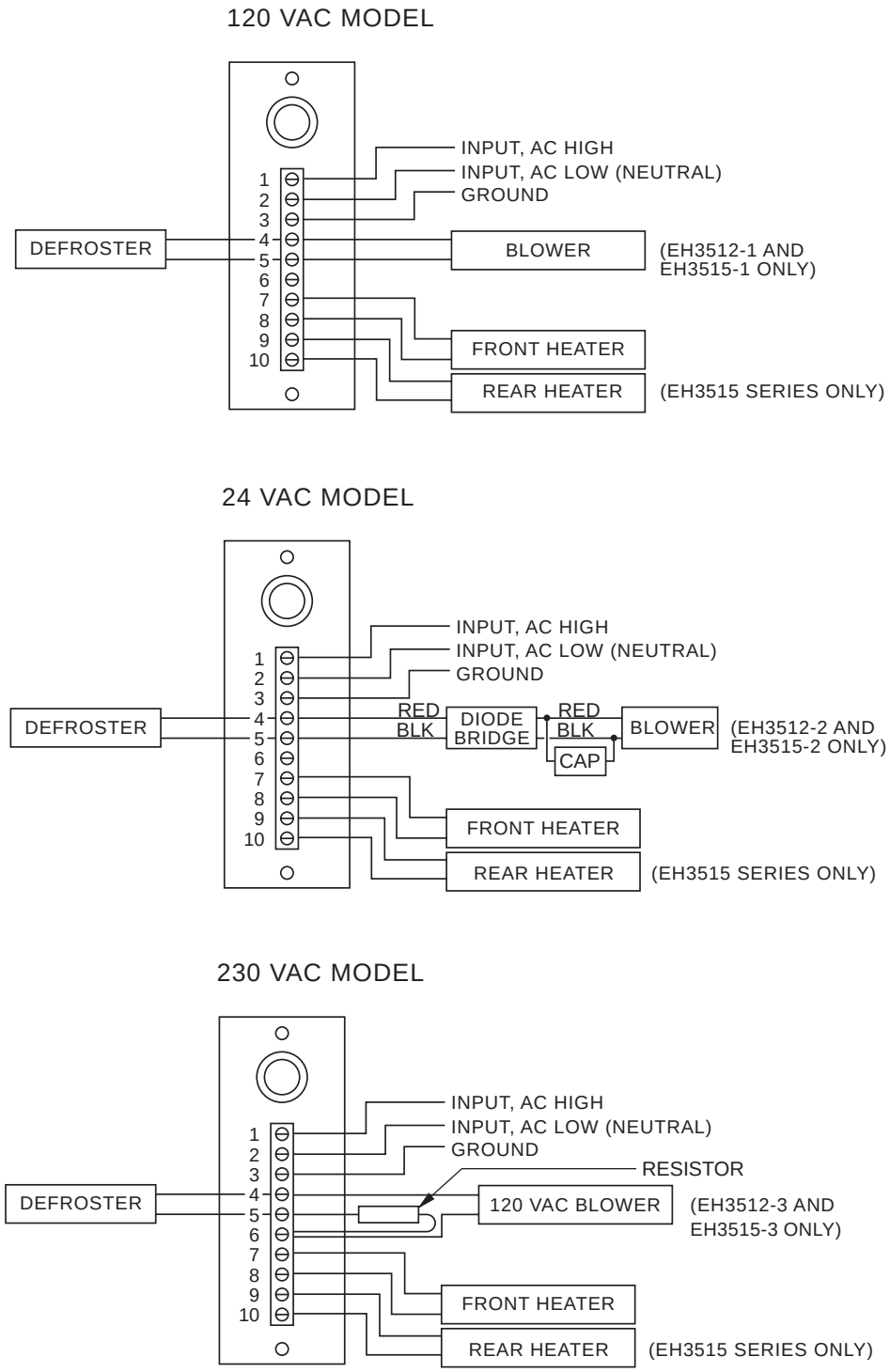


**Figure 3.** EH3508/EH3512/EH3515 Series Wiring Diagram

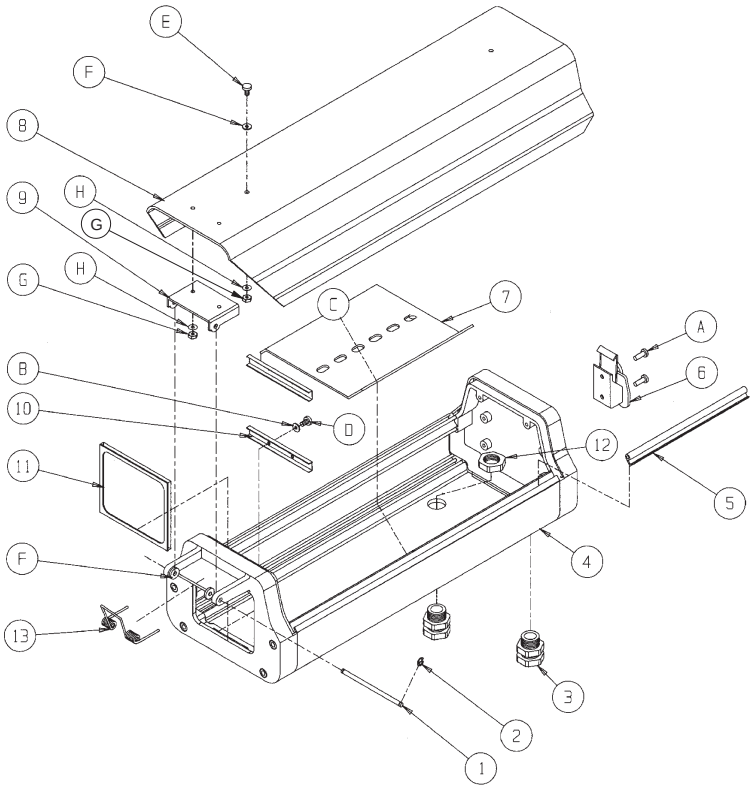


**Figure 4.** EH3515L Legacy® Series Exploded Assembly Diagram

**Table E.** EH3515L Legacy® Series Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| 1 | 1 | Lid attachment pin | EH350010105 |
| 2 | 2 | Type E clip | ZH.125ECLIP |
| 4 | 1 | Enclosure body | 35154001ASSY |
| 5 | 42 in. | Bulb seal gasket | EH470010011 |
| 6 | 1 | Link latch lock | EH550010010 |
| 7 | 1 | Camera sled | EH35064236COMP |
| 8 | 1 | Lid with latch | 35154003COMP |
| 9 | 1 | Lid bracket hinge | EH35004141COMP |
| 10 | 2 | Window bracket | EH35004142COMP |
| 11 | 1 | Window and gasket | EH35001000ASSY |
| 13 | 1 | Lid spring | EH350010107 |
| NS | 1 | Tilt table | 35154005COMP |
| NS | 1 | Tilt table cradle | 35154002COMP |
| NS | 1 | Tilt table gasket | 351510000 |
| NS | 1 | Circuit board assembly | PA05-0003-00A0 |
| A | 2 | Rivet | ZHRVT1/8X3/8CE |
| B | 4 | Flat washer | ZH148X375X32C |
| C | 2 | Screw, 6-32 x 3/8-inch, Phillips, pan head | ZH6-32X.375SPP |
| D | 4 | Screw, 6-32 x 3/8-inch, Phillips, type F | ZH6-SFX.375SPP |
| E | 2 | Screw, 4-40 x 3/8-inch, Phillips, pan head | ZH4-40X.375SPP |
| F | 4 | Nylon washer | ZH131X361X62N |
| G | 4 | Nut, 4-40, hex | ZH4-40NUTSH |
| H | 4 | Internal tooth lock washer, #4 | ZH4LWSIS |

NS = Not shown

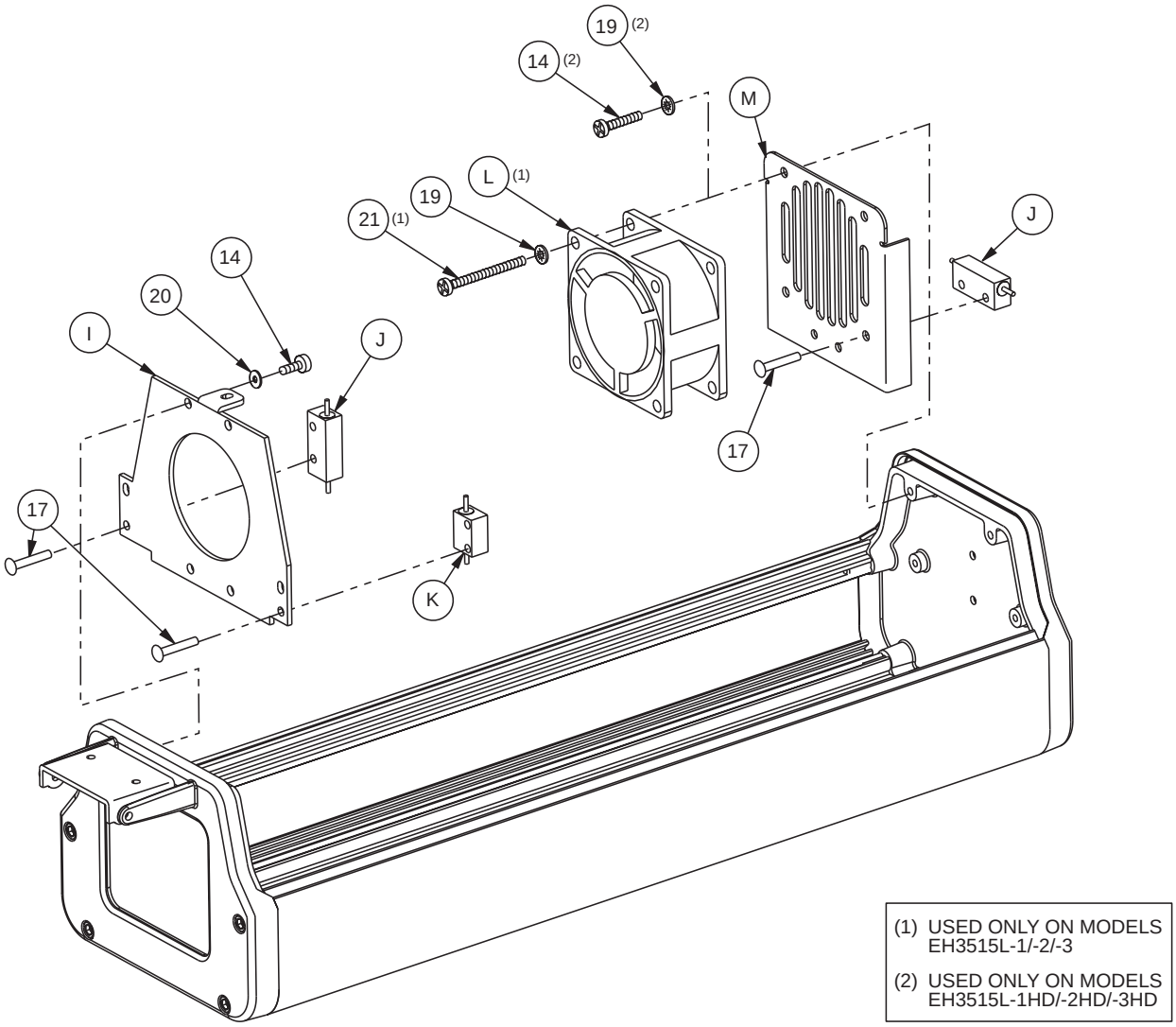


**Figure 5.** EH3515L Legacy® Series Accessories Exploded Assembly Diagram

**Table F.** EH3515L Legacy® Series Accessories Exploded Assembly Parts List

| Item | Qty | Description | Part Number |
|---|---|---|---|
| I | 1 | Heater bracket | 9484024 |
| J | | Heater, thermostatically controlled | |
| | 2 | 120 VAC | HT21-0201-0100 |
| | 2 | 24 VAC | HT02-1022-4310 |
| | 2 | 230 VAC | HT23-0201-0100 |
| K | | Defroster, continuous-duty | |
| | 1 | 120 VAC | HT21-1201-0100 |
| | 1 | 24 VAC | HT02-0322-4306 |
| | 1 | 230 VAC | HT23-1201-0100 |
| L | | Blower | |
| | 1 | 120 VAC | MM750010003 |
| | 1 | 24 VDC | ED210005 |
| | 1 | 230 VAC* | MM750010003 |
| M | 1 | Rear heater bracket | MF01-0030-004A |
| 14 | | Screw, 6-32 x 3/8-inch, Phillips, type F, pan head | ZH6-SFX.375SPP |
| | 4 | EH3515L-1/-2/-3 | |
| | 6 | EH3515L-1HD/-2HD/-3HD | |
| 15 | | Not used | |
| 16 | | Not used | |
| 17 | 6 | Pop rivet, 3/8-inch | ZHRVT1/8X3/8CE |
| 18 | | Not used | |
| 19 | 2 | Internal tooth lock washer, #6 | ZH6LWSIS |
| 20 | 4 | Nylon washer | ZH131X361X62N |
| 21 | 2 | Screw | |
| | | EH3515L-1/-3: 6-32 x 1 1/2-inch, Phillips, pan head | ZH6-32X1.50SPS |
| | | EH3515L-2: 6-32 x 1 3/8-inch, Phillips, pan head | ZH6-32X1.375SPP |
| 24 VAC Models Only | | | |
| ** | 1 | 24 VDC rectifier board | PCB9000277ASSY |

* Uses 120 VAC blower and resistor (resistor not included)
** Illustrated in 24 VAC wiring diagram in Figure 3.

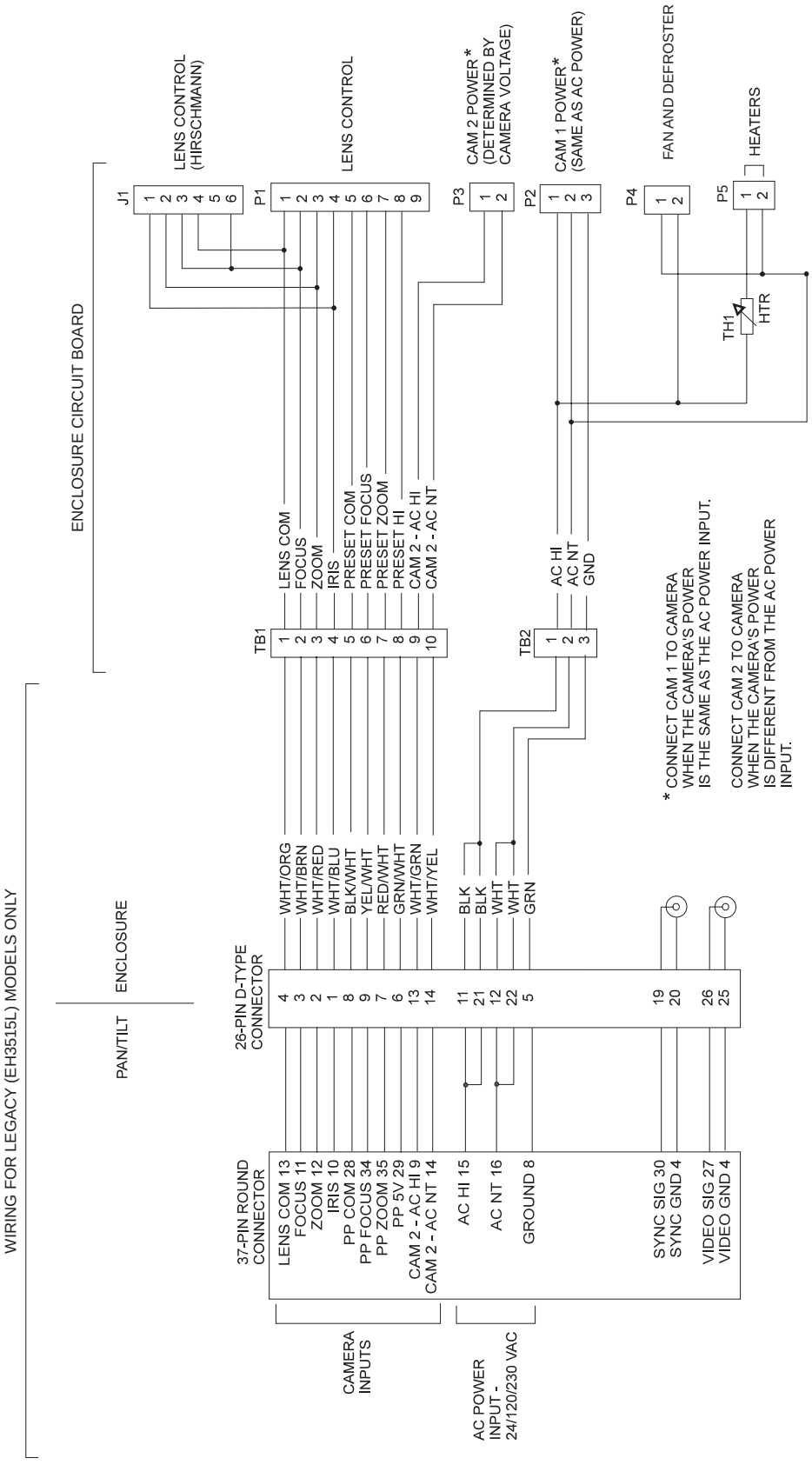


**Figure 6.** EH3515L Legacy® Series Wiring Diagram

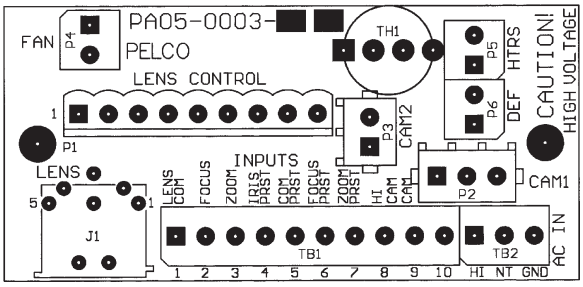


**Figure 7.** EH3515L Legacy® Series Circuit Board Component Locations

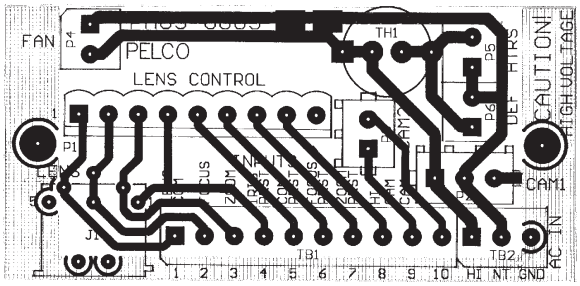


**Figure 8.** EH3515L Legacy® Series Layout of Circuit Board Traces

## WARRANTY AND RETURN INFORMATION

**WARRANTY**
Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment. Exceptions to this warranty are as noted below:

- Three years on Genex™ Series (multiplexers, server, and keyboard).
- Two years on all standard motorized and fixed focal length lenses.
- Two years on Esprit™, Legacy®, Intercept®, PV1000 Series, CM6700/CM8500/CM9500/CM9750/CM9760 Matrix, Spectra®, DF5 Series and DF8 Fixed Dome products.
- Two years on WW5700 series window wiper (excluding wiper blades).
- Two years on cameras.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

**RETURNS**
In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

## REVISION HISTORY

| Manual # | Date | Comments |
|---|---|---|
| C478SM | 8/98 | Original version. |
| | 8/99 | Added EH3508 Series and EH3515L Legacy® Series service and maintenance information. Revised the description, list of models, exploded assembly diagrams, parts lists, and wiring diagrams. |

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